

**COMMENTS OF THE DEPARTMENT OF WATER RESOURCES  
AT THE FOURTH PUBLIC WORKSHOP FOR THE REVIEW OF STANDARDS FOR THE  
SAN FRANCISCO BAY/SACRAMENTO-SAN JOAQUIN DELTA ESTUARY<sup>1</sup>**

The Department of Water Resources submits the following comments in response to the specific issues raised by the State Water Resources Control Board in its Notice of Public Workshop dated June 14, 1994.

- 1. What fish and wildlife standards should the SWRCB evaluate as alternatives in this review?**

The Department of Water Resources is not today recommending a particular set of standards for the Board to evaluate. We recognize, as the Board has itself previously recognized, that direct discussions are occurring among the interests to attempt to achieve accommodation and agreement on Bay-Delta standards. We, along with the Board, support and encourage those efforts. For our part, we have tried to lend technical assistance to that consensus effort in the development and assessment of specific proposals. We further support and recommend the continuation of the Board's efforts to facilitate agreement among the various interests.

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<sup>1</sup> Presented by David B. Anderson, July 13, 1994.



There are several points we would like to offer the Board for its guidance as it listens to and works with the interested parties to develop reasonable standards and a comprehensive plan for the Bay-Delta estuary.

**a. Involvement of the parties**

Achieving the greatest degree of agreement possible is the most practical and productive way to effectively resolve the enormous policy and factual complexities involved in the use of the waters of the Bay-Delta system. Policy resolution needs to occur prior to the water rights hearing whose processes are designed predominantly for policy implementation, not for policy making. The Board should continue to keep its processes as open and flexible as possible to afford the opportunity for consensus efforts and to seek interaction with and input from all the interested parties.

**b. Uncertainty**

The evaluation - and the ultimate promulgation - of standards should reflect, not mask, the fundamental uncertainty underlying our understanding of the biology of the estuary. While recognition of uncertainty

should elicit caution, it does not mean we should not go forward. What it does mean is that action based on uncertain premises should fully and expressly acknowledge and disclose that uncertainty.

Additionally, the Board should consider forms for standards reflective of uncertain relationships among controllable factors and biological responses: conditional, narrative, and general standards are forms useful for dealing with uncertainty.

**c. Rationale for standards**

The Board should be careful to set forth as completely as possible its reasons for selecting a particular parameter as the basis for a proposed standard. These reasons should explain how control of the chosen parameter would lead to the benefit expected to be produced, including all intermediate causal factors or steps. While this exercise is also a part of dealing with uncertainty, it is equally important to recognize that estuarine phenomena are interrelated. The parameter upon which a particular standard is based may actually be a surrogate for a remote or indirect cause of the phenomenon ultimately requiring control. For example, we have spoken previously about the use of  $X_n$ , which is the distance of a given near-bottom

salinity in the estuary from the Golden Gate. But bottom salinity at a certain location is not the thing affecting beneficial uses and not, therefore, what we ultimately care about. What we really care about is the outflow required to locate that salinity; and even then, outflow may itself likely be but an intermediate factor. The ultimate phenomenon may be the reduced incidence of loss of organisms to Delta diversions, produced by the transporting effects of higher outflow, for which, then, both  $X_n$  and outflow are surrogates. It may also reflect other factors, such as transport or the location of the entrapment zone, or simply correlations whose underlying causality is uncertain.

**d. Extant proposals**

The Board should specifically address standards which have been recently proposed for water quality and for flow and diversion for the Bay-Delta estuary and which have been the subject of public interest and debate. Among these are:

- (1) QWEST: While we appreciate the potential of QWEST as a compromise standard which has a measure of flexibility for project operators, it is not a

compromise which the parties generally have embraced or gravitated toward.

- (2) X<sub>2</sub>: The Board should review the EPA proposal as a general estuarine management alternative. Some parties have shown interest in this formulation of an estuarine standard. We have two strong caveats, however.

The first is that the Board should consider, rather, X<sub>n</sub>, which is the San Francisco Estuary Project's basic recommendation and for which X<sub>2</sub> was selected as a useful but ostensibly arbitrary instance. We are submitting to the Board today new studies that we have done on X<sub>3</sub>, i.e., the location of 3 ppt near-bottom salinity. We have reviewed these studies and distributed them to all the principals involved in the original analysis of X<sub>2</sub>. Our review indicates that X<sub>3</sub> correlates equally well as X<sub>2</sub> with estuarine biological response and also serves equally well to characterize the salinity field associated with the zone of maximum turbidity. Furthermore, we have analyzed the water supply impacts under EPA's formulation of an estuarine standard and at its advocated level of protection. Preliminarily, we

find that meeting  $X_3$  at comparable locations, while yielding the same biological benefit, would cost some one-third less water. As we recall Dr. Schubel's testimony from the D-1630 hearings, this is consistent with his view that some  $X_1$  to  $X_4$  may be equally suitable for estuarine management purposes. Since this study is technical and quite lengthy, we have submitted 10 copies to the Board, but we ask anyone else who desires a copy to please contact Mike Ford, the Department's Bay-Delta program manager.

The second caveat we offer is that a generalized "estuarine standard" should be framed in terms of outflow which  $X_n$  was originally intended to index. We think that  $X_2$  is misleading (if taken as a salinity parameter), diverts attention from the underlying processes for which it stands as a surrogate, and has no measurement or operational advantage over the use of outflow as a parameter.

- (3) Other EPA and D-1630 proposals: The Board's alternatives' analysis should address and resolve the remaining standards in these outstanding proposed regulatory scenarios.

**e. Relationship to ESA regulation**

As we indicated at previous workshops, we do not think the Board should set standards for endangered species per se. At a minimum, it should, in its balancing, account for the impacts of regulation by the federal ESA agencies (NMFS and USFWS). Alternatively, the Board could include consideration of threatened and endangered species in broad habitat management standards designed to provide general protection for all species. Frankly, we believe that the ESA agencies have great flexibility to work within the tremendous factual and scientific uncertainty surrounding species needs to use an appropriately crafted State habitat management plan to issue no-jeopardy opinions for listed species and to forbear from listing new species.

**f. Comprehensive Delta Plan**

We support the indications in the Board Notice that the Board intends to develop a broad range of measures and recommendations for the estuary in a comprehensive package of protection. We feel that the true power of the State lies in our ability to address not only water regulation issues beyond water quality (i.e. flow and diversion), but the full gamut of issues

related to the Bay-Delta environment. We need to put these issues on the table for several reasons.

First, the Board's determination of reasonable use must necessarily have reference to the full range of factors affecting beneficial uses in the estuary in order to determine the reasonable role to be played by water use regulation. Second, when all the factors are before us, perhaps we can stop falling into the trap of thinking that all the answers lie in water quality, or even that all the answers must be within the Board's direct regulatory reach. Third, we need to start somewhere on a comprehensive State habitat management plan, and why not here. I believe that speakers to follow will provide a framework or listing of elements for this comprehensive plan.

**g. Format for water quality and flow and diversion**

The Department has strongly urged the Board to develop and promulgate what amounts to a "flow and diversion plan" at the same time it develops and promulgates a new water quality plan. We have urged this for four reasons.

- (1) Flow and diversion are not water quality parameters under the Clean Water Act or Porter-Cologne. Flow may be an implementation device to meet a water quality objective like salinity in the Suisun Marsh; or salinity may be used to index flow needed to transport eggs and larvae to the Suisun Bay. In the first instance, the parameter affecting beneficial uses is one of water quality, a constituent of the water affecting a beneficial use; and in the second, it is not a constituent of the water, but a characteristic of the water course affecting a beneficial use.
- (2) As between water quality and flow and diversion, flow and diversion are by far more important factors with respect to fish and wildlife issues.
- (3) It is important to keep our own regulatory house in sensible order so that federal agencies will clearly see where they fit in.
- (4) In a water rights hearing, the Board is called upon to implement policy principles of general application as against specific water users. The Board develops policy for water quality in the water quality process. If the Board does not

develop policy for flow and diversion before the water rights hearing, then it will be searching for policy while limited to procedures useful for enforcing policy but not suitable to finding policy.

I know that the issue of CEQA compliance has been raised regarding the preparation of a flow and diversion plan. I believe that what we are asking the Board to do fits squarely within statutory exemption for State planning (Public Resources Code § 21102) as elaborated upon in § 15262 of the CEQA Guidelines. Use of the statutory exemption requires that the Board consider environmental factors, which we believe the Board is already doing, and requires that the adoption of a plan not have a legally binding affect on later activities. The plan as envisioned will not commit the Board to a definite course of action. It is merely to be considered, just as the California Water Plan or relevant water quality control plans are to be considered in water rights hearings. In addition, the plan should expressly provide that any implementation is contingent upon CEQA compliance (which, again, is the Board's declared intention already). While the Board should declare its intention to consider the plan, nothing in the plan is legally binding until and

unless made so in a water rights hearing subject to CEQA. This plan should be contrasted with water quality control plans which, although not binding in subsequent water rights hearings, do, upon adoption, have a legal and binding affect on other later activities.

**h. Specific/miscellaneous recommendations**

- (1) The Department recommends that the Board should consider and provide for completely interchangeable points of diversion for the CVP and SWP in the Delta.
- (2) The Board should refrain from utilizing biostandards, such as the fish survival indices which are suggested in the Notice. The science is simply too poor to justify this type of performance standard.
- (3) The Board should consider and adopt the water quality objectives for salinity, dissolved oxygen, and temperature provided in the 1991 Water Quality Control Plan.

**2. How should the economic and social affects of alternative standards be determined?**

We have provided as Attachment 2 to this presentation a paper by DWR economist Ray Hoagland that discusses ways of determining and evaluating the economic affects of alternative standards. The approach discussed in this paper is one in which we have had considerable success and agreement in working with EPA on its new Regulatory Impact Assessment and with the USBR on CVPIA analyses.

**3. Should the SWRCB request the CVP and SWP to implement portions of the draft standards prior to adoption of a water rights decision?**

As a general proposition, DWR and the SWP are looking for coordinated and cooperative approaches to dealing with all forms of Bay-Delta regulation. This is one of the essential purposes of the Framework Agreement between the Governor's Water Policy Council and the Federal Ecosystem Directorate.

In addition, we know that ESA regulation of the SWP and CVP currently not only imposes substantial costs on the projects, but provides conditions in the winter and spring, beyond D-1485 requirements, thought to be beneficial for

many aquatic species and for the Bay-Delta environment in general. Directly or indirectly, the projects would likely already be "implementing" future Board standards to some substantial degree.

We think that it may be possible to go beyond this coincidental implementation of Board standards. If the Board sets more general habitat protections that also benefit species of concern, there may be sufficient room for an interim SWP/CVP compliance to secure no-jeopardy opinions from NMFS and USFWS, or at least to modify the manner of current ESA regulation of the projects.